State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-XXX

NPDES NO. CA0062588

WASTE DISCHARGE REQUIREMENTS
for
NORTHROP GRUMMAN CORPORATION
MILITARY AIRCRAFT SYSTEMS DIVISION
(Newbury Park Facility)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. Northrop Grumman Corporation, Military Aircraft Systems Division (Northrop) discharges wastes under waste discharge requirements contained in Order No. 96-047, adopted by this Board on June 10, 1996.

2. Northrop applied for revision of its waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit. The revised Order will reflect changes in property ownership, location of discharge, treatment technology, and discharge volume. Northrop has since sold their 100-acre property to Investment Development Services, Inc. However, as the responsible party, Northrop will retain the NPDES permit and continue with the ground water cleanup operations.

3. Northrop owned and operated a facility that manufactured remote control target aircraft and aircraft assemblies. The facility is located at 1515 Rancho Conejo Boulevard in Newbury Park, City of Thousand Oaks. (Figure 1 shows the location of the facility.) Northrop utilized solvents, paint products, resins, and aviation fuels in the manufacturing and testing of targets and aircraft components.

4. In 1984, Northrop discovered that, due to leaking underground storage tanks, the ground water beneath their facility was contaminated with the following volatile organic compounds (VOCs): 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), 1,1,1-trichloroethane (TCA), 1,1-dichloroethylene (DCE), 1,1,1-trichloroethylene (TCE), toluene, methyl ethyl ketone, and methylene chloride.

5. In March 1991, Northrop began phasing out manufacturing operations at the site. By December 1991, the facility was closed.

6. Northrop implemented ground water cleanup measures according to a workplan approved by the Regional Board. Ground water is extracted and treated with granular activated carbon (GAC) and stripping towers to remove volatile organics.

7. Northrop formerly discharged up to 0.144 million gallons per day (mgd) of treated ground water to an intermittent stream, tributary to the South Branch of Arroyo Conejo, through

Discharge Serial No. 001 (Latitude 34°24'04" and Longitude 118°54'13"). The South Branch of Arroyo Conejo is tributary to Conejo Creek, Calleguas Creek, and Mugu Lagoon, waters of the United States, above the estuary, and is part of the Calleguas Creek Watershed Management Area.

8. On November 20, 1998, Northrop notified the Regional Board that they sold the property to Investment Development Services, Inc. (IDS), and that they had obtained an easement to continue operating the ground water treatment system under this NPDES permit.

9. IDS submitted a Notice of Intent (NOI) to comply with the General Permit for Stormwater Discharges Associated with Construction Activity. IDS subdivided the property, demolished some of the existing structures, and began developing the site. During grading activities, the contractor inadvertently cut off the utilities. As a result, Northrop has not been able to operate the ground water treatment system since December 1999. Their last discharge occurred in November 1999.

10. In January 1999, Northrop submitted a revised workplan that indicates the following changes:

- The new discharge point will be located at Latitude 34°12'04" and Longitude 118°55'52";
- The treatment system will utilize liquid phase activated carbon (LAC) filters instead of GAC; and,
- The design flow will increase from 0.144 million gallons per day (mgd) to 0.720 mgd.

The ground water treatment system is in the design phase and is anticipated to be operational by the Winter of 2000.

11. Federal law stipulates that NPDES permits require the use of Best Available Technology (BAT) economically achievable to treat these wastes. Carbon filters have been used extensively for clean up of contaminated ground water, particularly for the removal of volatile organic compounds. These methods are currently considered to be the BAT economically achievable.

12. The requirements in the *National Pollutant Discharge Elimination System General Permit and Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (CAS000002)*, shall be incorporated into this Order.

13. The Regional Board and the United States Environmental Protection Agency (USEPA) have classified this discharge as a minor discharge, since it has a threat to water quality of category 2 and complexity rating of B, or a combined rating of 2-B.

14. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties on June 13, 1994. The Basin Plan contains beneficial uses and water quality objectives for the Arroyo Simi and other tributaries of Calleguas Creek and for the South Las Posas and North Las Posas ground water basins.

15. The beneficial uses of the receiving surface waters are:

Arroyo Conejo - Hydro Unit No. 403.64
- existing: ground water recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, wildlife habitat, and preservation of rare, threatened or endangered species;
- potential: municipal and domestic supply;

Conejo Creek - Hydro Unit No. 403.63
- existing: ground water recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, and wildlife habitat;
- potential: municipal and domestic supply;

Calleguas Creek - Hydro Unit No. 403.12
- existing: industrial service supply, industrial process supply, agricultural supply, ground water recharge, contact and non-contact water recreation, warm freshwater habitat, and wildlife habitat;
- potential: municipal and domestic supply;

Calleguas Creek - Hydro Unit No. 403.11
- existing: agricultural supply, ground water recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, rare, threatened or endangered species, and wetland habitat;
- potential: municipal and domestic supply;

Calleguas Creek Estuary - Hydro Unit No. 403.11
- existing: non-contact water recreation, commercial and sport fishing, estuarine habitat, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, and wetland habitat;
- potential: navigation, water contact recreation;

Mugu Lagoon - Hydro Unit No. 403.11
- existing: navigation, non-contact water recreation, commercial and sport fishing, estuarine habitat, marine habitat, preservation of biological habitats, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, shellfish harvesting, and wetland habitat; and,
- potential: water contact recreation.

16. On May 12, 1999, USEPA approved the State Water Resources Control Board's (State Board) Water Quality Assessment (WQA), 303(d) list of impaired water bodies. Within the Calleguas Creek Watershed, the following water bodies are classified as impaired: Mugu Lagoon, tributaries from duck ponds to Mugu Lagoon, Calleguas Creek (Estuary to Arroyo Las Posas), Revolon Slough and Beardsley Channel/Wash, Conejo Creek, Arroyo Conejo

North Fork, Arroyo Las Posas, and Arroyo Simi. Impaired waters do not fully support beneficial uses.

South Branch Arroyo Conejo is not on the 303(d) list. However, reaches of Arroyo Conejo (3, 2, and 1) downstream of the discharge, are listed because of the following water quality problems: algae, ammonia, organic enrichment (low dissolved oxygen), sulfates, total dissolved solids (TDS), toxicity; and for the following bioaccumulative substances in fish tissue: Chem A; Chromium; DDT; Dachtal; Endosulfan; Nickel; Silver; and, Toxaphene. Known and/or suspected pollution sources include point and nonpoint sources.

17. Interim monitoring requirements will be placed in this Order for those constituents included in the 303(d) list for Arroyo Conejo.

18. On May 18, 2000, USEPA promulgated numeric criteria for priority pollutants for the state of California [known as the California Toxics Rule (CTR) and codified as CFR part 131.38]. On March 2, 2000, the State Board adopted State Board Resolution No. 2000-15, "*Adoption of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed bays and Estuaries of California* (State Implementation Policy or SIP)." On April 26, 2000, the SIP was amended by Resolution No. 2000-030, "*Amending Resolution 2000-15 Regarding Adoption of the Policy for Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California*".

19. 40 CFR 122.44(d) (1) (ii), requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge causes, has reasonable potential to cause, or contributes to the excursion of a receiving water quality objective. In performing the reasonable potential analysis (RPA), the permitting authority shall use procedures that account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, and the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity). Because of effluent variability, there is always some degree of uncertainty in determining an effluent's impact on the receiving water. The SIP addresses this issue by suggesting the use of a statistical approach.

20. The following pollutants were found present in the influent and are subject to effluent limitations: Toluene, 1,1-DCA, 1,2-DCA, 1,1,1-TCA, 1,1-DCE.

21. The SIP requires that a limit be imposed for a pollutant: if the maximum effluent concentration (MEC) was greater than the most stringent CTR criteria, if the lowest non-detected value was greater than the most stringent CTR criteria, or if the background concentration was greater than the CTR criteria. RPAs were performed for the priority pollutants that had sufficient effluent data and receiving water data. Based on the RPA, the following pollutants are subject to effluent limitations: chromium VI, copper, mercury, selenium, silver, benzene, carbon tetrachloride, dibromochloromethane, dichlorobromomethane, 1,1,1-TCE, 1,1-DEC, 1,2-DCA, 1,1-DCE, ethylbenzene, tetrachloroethylene, toluene, and vinyl chloride. Pollutants that lacked sufficient data to do RPAs are subject to interim monitoring requirements.

22. Toxic substances are regulated in this Order by water quality-based effluent limitations

(WQBEL) derived from USEPA national water quality criteria, the CTR, the National Toxics Rule (NTR), or USEPA Gold Book, and/or best professional judgement (BPJ).

23. The issuance of waste discharge requirements for this discharge is exempt from the provisions of chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
24. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

The Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public hearing heard and considered all comments pertaining to the discharge and to the tentative requirements.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall take effect at the end of ten days from the date of its adoption, provided the Regional Administrator, USEPA, has no objections.

**IT IS HEREBY ORDERED** that Northrop Grumman Corporation Military Aircraft Systems Division, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

## I. EFFLUENT LIMITATIONS

A. Wastes discharged shall be limited to treated ground water only, as proposed.

B. The discharge of an effluent from Discharge Serial No. 001 with constituents in excess of the following limits is prohibited:

| CTR # * | Constituent | Units | Discharge Limitations | |
|---|---|---|---|---|
| | | | Monthly Average | Daily Maximum |
| | Turbidity | NTU | 50 | 75 |
| | Settleable solids | ml/L | 0.1 | 0.2 |
| | Suspended solids | mg/L | 50 | 75 |
| | | lbs/day[1/] | 300 | 450 |
| | Oil and grease | mg/L | 10 | 15 |
| | | lbs/day[1/] | 60 | 90 |
| | $BOD_5 20^0C$ | mg/L | 20 | 30 |
| | | lbs/day[1/] | 120 | 180 |
| | Total dissolved solids | mg/L | ---- | 850 |
| | | lbs/day[1/] | ---- | 5090 |

| CTR # * | Constituent | Units | Discharge Limitations | |
|---|---|---|---|---|
| | | | Monthly Average | Daily Maximum |
| | Sulfate | mg/L | ---- | 250 |
| | | lbs/day[1/] | ---- | 1500 |
| | Chloride | mg/L | ---- | 150 |
| | | lbs/day[1/] | ---- | 900 |
| | Boron | mg/L | ---- | 1.0 |
| | | lbs/day[1/] | ---- | 6.0 |
| | Nitrate + Nitrite (as Nitrogen) | mg/L | ---- | 10 |
| | | lbs/day[1/] | ---- | 60 |
| | Residual chlorine [2/] | mg/L | ---- | 0.1 |
| | | lbs/day[1/] | ---- | 0.6 |
| | Sulfides | mg/L | ---- | 1.0 |
| | | lbs/day[1/] | ---- | 6.0 |
| 5b | Chromium VI | µg/L | 8.1 | 16 |
| 6 | Copper | µg/L | 25 | 51 |
| 8 | Mercury | µg/L | 0.05 | 0.10 |
| 10 | Selenium | µg/L | 4.1 | 8.2 |
| 11 | Silver | µg/L | 22 | 44 |
| 19 | Benzene | µg/L | --- | 1.0 |
| 21 | Carbon tetrachloride | µg/L | 0.25 | 0.5 |
| 23 | Dibromochloromethane | µg/L | 0.40 | 0.81 |
| 27 | Dichlorobromomethane | µg/L | 0.56 | 1.1 |
| 28 | 1,1-Dichloroethane | µg/L | --- | 5.0 |
| 29 | 1,2-Dichloroethane | µg/L | 0.38 | 0.5 |
| 30 | 1,1-Dichloroethylene | µg/L | 0.057 | 0.12 |
| 33 | Ethylbenzene | µg/L | ---- | 10 |
| 38 | Tetrachloroethylene | µg/L | 0.8 | 1.6 |
| 39 | Toluene | µg/L | ---- | 10 |
| 41 | 1,1,1-Trichloroethane | µg/L | --- | 5.0 |
| 44 | Vinyl chloride | µg/L | 2 | 0.5 |
| | Xylene | µg/L | ---- | 10 |
| | Phenolic compounds (chlorinated) | µg/L | ---- | 1.0 |
| | Methyl ethyl ketone | µg/L | ---- | 4.2 |

* This number corresponds to the compound number found in Table 1 of CTR. It is simply the order in which the 126 priority pollutants were listed 40 CFR part 131.38 (b)(1).

1/ Based on the maximum waste flow rate of 0.720 Million Gallons per Day (MGD).

2/ If chlorine is used.

C. Acute Toxicity Limitation:

The acute toxicity of the effluent shall be such that the average survival in undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70%

survival.

If the discharge consistently exceeds the acute toxicity limitation, a toxicity identification evaluation (TIE) is required. The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources of toxicity are identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

## II. REQUIREMENTS AND PROVISIONS

A. Discharge of wastes to any point other than specifically described in this Order is prohibited and constitutes a violation thereof.

B. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements," dated March 1, 1999. If there is any conflict between provisions stated hereinbefore and attached "Standard Provisions", those provisions stated hereinbefore prevail.

C. This Order includes the attached Monitoring and Reporting Program. If there is conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.

D. This Order includes the attached "Storm Water Pollution Prevention Plan" (Attachment A).

E. This Order may be modified, revoked and reissued or terminated in accordance with the provisions of 40 CFR Part 122.44, 122.62, 122.63, 122.64, 125.62, and 125.64.

## III. EXPIRATION DATE

This Order expires on July 10, 2005.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

## IV. RESCISSION

Order No. 96-047, adopted by this Board on June 10, 1996, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on August 31, 2000.

Dennis A. Dickerson
Executive Officer

/AVCA

**FIGURE 1**

Reference: USGS Newbury Park quadrangle, 1950

Northrop Vicinity Map Key:

1. New Treatment System Location
2. Discharge to storm drain
3. Discharge from storm drain to unlined channel

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**FIGURE #2**